**IDENTITY**

Bluworld HOMelements LLC  
635 W. Michigan Street  
Orlando, FL 32805  
For Information: 1+407-426-7674  
Chemtrec  
Emergency Telephone: 800.424.9300  
Chemical Name: Ethyl Alcohol (Denatured)  
Manufacturer’s Code: Formula 1  
US Trade Name: Nu-Flame Bio-Ethanol Fuel  
HMIS:  
Health: 2  
Fire: 3  
Reactivity: 0  
Product Appearance and Odor: Clear, colorless liquid; Characteristic alcohol odor.

**HAZARDOUS INGREDIENTS**

<table>
<thead>
<tr>
<th>OCCUPATIONAL EXPOSURE LIMITS</th>
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<tbody>
<tr>
<td>INGREDIENT</td>
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<tr>
<td>Ethyl Alcohol</td>
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<tr>
<td>Proprietary Ingredients</td>
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<tr>
<td>Denatonium Benzoate (BITR™)</td>
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<tr>
<td>Isopropyl Alcohol (IPA)</td>
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**HAZARDOUS IDENTIFICATION**

<table>
<thead>
<tr>
<th>HAZARD RATING</th>
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<tr>
<td>4 = EXTREME</td>
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<tr>
<td>3 = HIGH</td>
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<tr>
<td>2 = MODERATE</td>
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<tr>
<td>1 = SLIGHT</td>
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<tr>
<td>0 = INSIGNIFICANT</td>
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**EMERGENCY FIRST AID PROCEDURES**

**Eyes:**  
Immediately flush affected area with plenty of cool water and continue for at least 15 minutes. Remove and wash contaminated clothing before reuse. GET MEDICAL ATTENTION IMMEDIATELY.

**Skin:**  
Rinse exposed area well with water. If irritation occurs, consult a physician

**Ingestion:**  
If victim is conscious and able to swallow, have victim drink water or milk to dilute. Never give anything by mouth if victim is unconscious or having convulsion. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. Induce vomiting only if advised by physician or Poison Control Center.

**Inhalation:**  
Immediately remove victim to fresh air. If victim has stopped breathing give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.
FIRE FIGHTING DATA

FLASH POINT: 58°F (14°C) TCC
70°F (21°C) TOC

NIOSH approved respirators should be worn. Use water spray to cool equipment and to disperse vapors. Alcohol flames may be difficult to see because they are virtually colorless. Vapors form from this product and may travel by air currents to an ignition source and flash back.

Extinguishing Media: Water, carbon dioxide, “alcohol-type foam”, or dry chemical.

ACCIDENTAL RELEASE MEASURES

Eliminate all source of ignition. Stop leak if without risk. Flush spill away with water spray. Wear NIOSH approved respirator.

HANDLING and STORAGE PRECAUTIONS

Material is classified as a flammable liquid. Keep liquids and its vapors away from heat, sparks, open flame and ignition sources. Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be NO SMOKING areas. Use non-sparking type tools and equipment, including explosion proof ventilation.

Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, static electricity or other sources of ignition; they may explode and cause injury or death.

EXPOSURE CONTROL and PERSONAL PROTECTION

Exposure Guidelines:
Ventilation: Good general ventilation is sufficient. Avoid inhalation of vapors.
Respiratory protection: NIOSH approved respirator should be worn.
When ACGIH threshold limit values on time weighted averages are exceeded.
Skin Protection: Avoid skin contact. Wear rubber gloves.
Eye Protection: Avoid eye contact. Wear safety glasses with splash guards or goggles.

PHYSICAL DATA

Boiling Point: 173°F
Volatile by Volume: 100%
Solubility in Water: Complete

Specific Gravity: 0.797@60 F/60 F
Vapor Density: 1.6
Appearance: Colorless
Evaporation Rate: 1

Vapor Press@ 20C: 44.6 mm Hg
Odor: Characteristic

Consideration: Appearance & Odor can be modified by non-hazardous components of the mixture.
STABILITY and REACTIVITY DATA

Stability: The product is stable.
Condition to Avoid: Heat, sparks, open flame.
Materials to avoid: Oxidizing materials can cause vigorous reaction
Hazardous Decomposition: None. However as with any other organic material, combustion will produce carbon dioxide and possible carbon monoxide.
Hazardous Polymerization: Will Not Occur.

TOXICOLOGICAL INFORMATION

Overexposure maybe fatal if swallowed.
Harmful if inhaled or absorbed through the skin.
Causes skin, eye, and upper respiratory track infection.
Can cause central nervous system depression.
Chronic Effects: Damage to liver, heart and kidneys.

ECOLOGICAL INFORMATION

Not Applicable

DISPOSAL CONSIDERATIONS

Vapors may collect in empty containers. Treat empty containers as hazardous. Ensure compliance with federal, state, and local regulations.

TRANSPORTATION INFORMATION

Ethanol (Denatured Alcohol), 3, UN1170, PGII

REGULATORY INFORMATION

SARA 145

ADDITIONAL INFORMATION

Ensure compliance with federal, state, and local regulations.

________________________________________________________________________
The information provided herein is given in good faith, but no warranty, expressed or implied, is made.

Bluworld/Nu-Flame™